











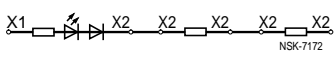
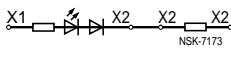
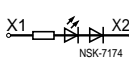
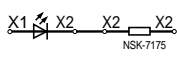


3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Contact blocks and lampholders Selection and ordering data

1

Version	Symbols	Order No.	Price	Weight approx.	Packing
	for actuators with 2 or 3 positions	▶ Preferred type	1 unit	kg	Unit
3SB13 00-0E	<i>With screw terminals, for front plate mounting, 60 mm mounting depth. Version with holder for combining with actuators¹⁾. Identification numbers 1-3-2 to DIN EN 50 013</i>				
	Contact blocks				
	1 NO		▶ 3SB13 00-0B	0.03	1
	1 NC		▶ 3SB13 00-0C	0.03	1
	1 NO, 1 NO		▶ 3SB13 00-0E	0.04	1
	1 NC, 1 NC		▶ 3SB13 00-0F	0.04	1
	Contact blocks and lampholders				
	1 NO, BA 9s		▶ 3SB13 00-1B	0.04	1
	1 NC, BA 9s		▶ 3SB13 00-1C	0.04	1
	Lampholders				
	BA 9s		▶ 3SB13 00-2A	0.03	1
	Operational voltage 24 V AC/DC BA 9s with 24 V incandescent lamp ³⁾ (3SX1 344)		▶ 3SB13 00-2H	0.03	1
	Operational voltage 220/230 V AC ²⁾ 220/240 V AC BA 9s with integral voltage reducer and 130 V lamp ³⁾ (3SX1 731)		▶ 3SB13 00-2C ▶ 3SB13 00-2L	0.03	1
	Operational voltage 220/240 V DC BA 9s for 24 V AC/DC LED lamps ⁴⁾ ⁵⁾ only		▶ 3SB13 00-2S	0.05	1
	Operational voltage 220/240 V AC BA 9s for 24 V AC/DC LED lamps ⁴⁾ only		▶ 3SB13 00-2T	0.04	1
Operational voltage 60 V DC BA 9s for 24 V AC/DC LED lamps ⁴⁾ only		3SB13 00-2W	0.03	1	
Operational voltage 110/130 V AC/DC BA 9s for 24 V AC/DC LED lamps ⁴⁾ only		3SB13 00-2V	0.04	1	

For lamps, see page 9/108.

➔ Safety function in accordance with IEC 60 947-5-1-3 and DIN VDE 0660, Pt. 200.

1) When a contact block is fitted to the centre position of a holder, the appropriate extra parts (thrust cap for pushbutton, thrust pad for rotary

drive) must be fitted to the actuator plunger (see page 9/108).

2) Max. voltage 242 V AC.
3) Lamp included.


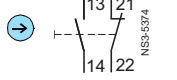
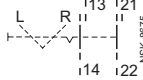

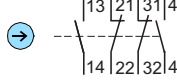
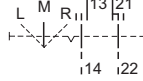
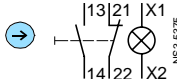


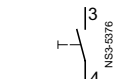
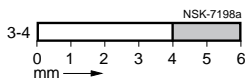
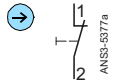
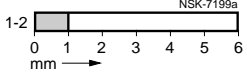
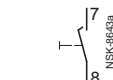
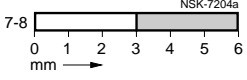

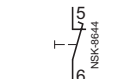
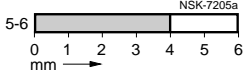
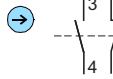

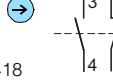

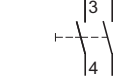
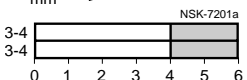

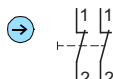
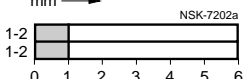
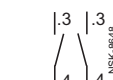
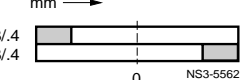
4) LED lamp must be ordered separately, see page 9/108.

5) All 3 positions in the holder are occupied in this case. Only suitable for indicator lights.

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Contact blocks and lampholders Selection and ordering data

Version	Symbols	Order No.	Price	Weight approx.	Packing	
for actuators with 2 or 3 positions ▶ Preferred type		1 unit	kg	Unit		
3SB13 20-0A <i>With screw terminals, for front plate mounting, 60 mm mounting depth. Version with holder for combining with actuators¹⁾. Identification numbers 1/2-5/6-4/3 to DIN EN 50 013</i>						
	Contact blocks 1 NO + NC 		▶ 3SB13 20-0A	0.04	1	
	1 NO + 1 NC, 1 NO + 1 NC 		▶ 3SB13 20-0D	0.06	1	
Contact blocks and lampholders 1 NO + 1 NC, BA 9s 			▶ 3SB13 20-1A	0.05	1	
Version	Symbols	Contact travel	Order No.	Price	Weight approx.	Packing
		■ contact closed □ contact open ▶ Preferred type	1 unit	kg	Unit	
3SB14 00-0B <i>With screw terminals, for front plate mounting, 60 mm mounting depth. Version without holder as additional component to the version without holder and to the command point</i>						
	Contact blocks with one contact 1 NO ³⁾ 		▶ 3SB14 00-0B	0.01	20	
	1 NC ³⁾ 		▶ 3SB14 00-0C	0.01	20	
	1 NO leading 		▶ 3SB14 00-0R	0.01	20	
	1 NC lagging ³⁾ 		▶ 3SB14 00-0S	0.01	20	
Contact blocks with 2 contacts 1 NO + 1 NC 			▶ 3SB14 00-0A	0.02	20	
1 NO + 1 NC for EMERGENCY STOP with positive latching acc. to EN 418 			▶ 3SB14 00-0V	0.01	20	
	2 NO ³⁾ 		▶ 3SB14 00-0G	0.02	20	
	2 NC 		▶ 3SB14 00-0H	0.02	20	
	1 NO, 1 NO ²⁾ 		▶ 3SB14 00-0J	0.02	20	

For lamps, see page 9/108.

➔ Safety function in accordance with IEC 60 947-5-1-3 and DIN VDE 0660, Pt. 200.

1) When a contact block is fitted to the centre position of a holder, the appropriate extra parts (thrust cap for pushbutton, thrust pad for rotary

drive) must be fitted to the actuator plunger (see page 9/108).


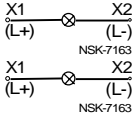
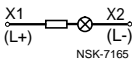
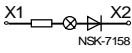
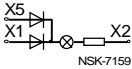
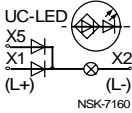

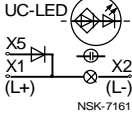
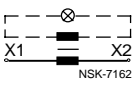
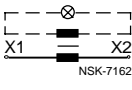
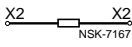
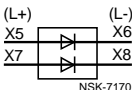

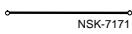
2) Contact block only suitable for joystick switches.

3) Not suitable for EMERGENCY STOP mushroom pushbutton with positive latching in accordance with EN 418, 3SB10 00-1MC00.

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Contact blocks and lampholders Selection and ordering data

Version	Symbols	Order No.	Price	Weight approx.	Packing
		▶ Preferred type	1 unit	kg	Unit
3SB14 00-2C	<i>With screw terminals, for front plate mounting, 60 mm mounting depth. Version without holder as additional component to the version without holder and to the command point</i>				
	Lampholders BA 9s Operational voltage 24 V AC/DC BA 9s, with 24 V incandescent lamp (3SX1 344) ²⁾		▶ 3SB14 00-2A ▶ 3SB14 00-2H	0.01 0.025	20 10
	Operational voltage 110/130 V AC/DC, BA 9s, with integral resistance for longer lamp life and 130 V incandescent lamp (3SX1 731) ²⁾		▶ 3SB14 00-2B	0.025	10
3SB14 00-2N	Operational voltage 220/230 V ¹⁾ AC 230/240 V AC BA 9s, with integral voltage reducer and 130 V incandescent lamp (3SX1 731) ²⁾		▶ 3SB14 00-2C ▶ 3SB14 00-2L	0.025	10
	Lampholder, BA 9s, with decoupled lamp test facility ³⁾ Operational voltage AC 220 V AC 230/240 V with 130 V lamp (3SX1 731) ²⁾ for parallel load		▶ 3SB14 00-2M ▶ 3SB14 00-2N	0.025	10
3SB14 00-4.	Operational voltage 6 ... 130 V AC/DC for incandescent lamps, 24 V AC/DC for LED lamps for parallel load		▶ 3SB14 00-2P	0.025	10
	Operational voltage 6 ... 130 V for incandescent lamps, 110/220 V for glow lamps, 24 V AC/DC for LED lamps		▶ 3SB14 00-2Q	0.025	10
	Lampholders⁴⁾ BA 9s, with transformer and lamp ⁵⁾ 110/127/24 V 220/240/24 V 110/127/ 6 V 220/240/ 6 V } 50/60 Hz		▶ 3SB14 00-4A ▶ 3SB14 00-4C ▶ 3SB14 00-4M ▶ 3SB14 00-4P	0.08	1
3SB14 00-5.	BA 9s, with transformer and lamp ⁶⁾ 110/127/24 V 220/240/24 V 110/127/ 6 V 220/240/ 6 V } 50/60 Hz		▶ 3SB14 00-5A ▶ 3SB14 00-5C ▶ 3SB14 00-5M ▶ 3SB14 00-5P	0.08	1
	Voltage reducer for snap-on mounting Operational voltage 240 V AC/DC; 130 V lamp (3 SX1 731) and lampholder 3SB 14 00-2 A must be ordered separately		▶ 3SB14 00-3B	0.01	20
3SB14 00-3B	Element with 2 diodes 1N 4007 $U_{RMS} = \text{max. } 250 \text{ V}$ $I_{FAV} = 0.8 \text{ A at } T_u = 60 \text{ }^\circ\text{C}$		▶ 3SB14 00-3X	0.01	20
	Support terminal Colour: brown		3SB19 02-2BT	0.015	10

For lamps, see page 9/108.

1) Max. voltage 242 V AC.

2) Lamp included.

3) See page 9/109 for examples of circuits

4) Other transformer voltages on request.

5) Transformer 3SB14 00-4., mounting depth 95 mm, requires two mounting positions.





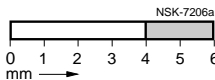

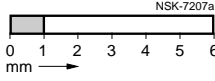
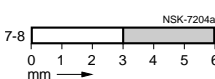

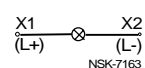
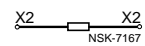
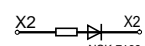

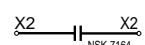

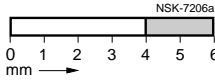



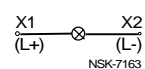
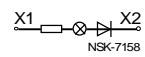
6) Transformer 3SB14 00-5., mounting depth 60 mm, requires two mounting positions and projects 10 mm laterally.

3SB1 Pushbutton Units and Indicator Lights


22 mm Mounting Diameter

Contact blocks, lampholders and holders

Selection and ordering data

Version	Symbols	Contact travel	Order No.	Price	Weight approx.	Packing
		 contact closed  contact open	▶ Preferred type	1 unit	kg	Unit
3SB14 30-0C	<i>With screw terminals, for front plate mounting, 43 mm mounting depth</i> <i>Version without holder¹⁾</i>					
	Contact block with one contact 1 NO ²⁾			▶ 3SB14 30-0B	0.015	10
	1 NC			▶ 3SB14 30-0C	0.015	10
3SB14 30-3C, 3SB14 20-3D	1 NO leading			3SB14 30-0R	0.015	10
	Lampholders BA 9s			▶ 3SB14 30-2A	0.01	10
	Voltage reducers for connecting a 130 V lamp (3SX1 731) to 220/230 V AC/DC ³⁾			▶ 3SB14 30-3C	0.02	20
3SB14 04-0B	to 220/230 V AC ⁴⁾ with snap-on mounting			▶ 3SB14 30-3A	0.02	20
	to 220 V AC ³⁾			3SB14 20-3D	0.02	20
<i>With tab connection 2.8 DIN 46 247⁵⁾, for front plate mounting, 60 mm mounting depth (without connections) for contact blocks with 1 contact, lampholder: 2 x (2.8 - 0.8)</i>						
	Contact block with one contact 1 NO			▶ 3SB14 04-0B	0.01	20
3SB19 02-1AC	1 NC			▶ 3SB14 04-0C	0.01	20
	Lampholder BA 9s			▶ 3SB14 04-2A	0.01	20
	BA 9s with integral voltage reducer and 130 V lamp (3SX1 731) Operational voltage 220/230 V AC			3SB14 04-2C	0.025	20
	230/240 V AC			3SB14 04-2L	0.025	20
3SB19 02-1AE	Holder 3SB19⁶⁾ Holder for 3 contact blocks Holder for 5 contact blocks⁷⁾	inscription with identification numbers 1-3-2 1/2-5/6-4/3 3-1-5-2-4 5/6-1/2-9/0-4/3-7/8 Positions 3 and 4 of 3SB19 02-1AE, 5/6 and 7/8 of 3SB19 02-1AF cannot be used for contact blocks with EMERGENCY STOP functions.	▶ 3SB19 02-1AC ▶ 3SB19 02-1AD ▶ 3SB19 02-1AE ▶ 3SB19 02-1AF	0.02	100	

For lamps, see page 9/108.

 Safety function in accordance with IEC 60 947-5-1-3 and DIN VDE 0660, Part 200.

- Also suitable for enclosed pushbutton units and indicator lights.
- Not suitable for 3SB10 00-1MC ... EMERGENCY STOP with positive latching.

3) Support terminals must be used to comply with DIN VDE 0660, Part 500.

4) Max. voltage 242 V AC.

5) Rated insulation voltage 500 V AC.

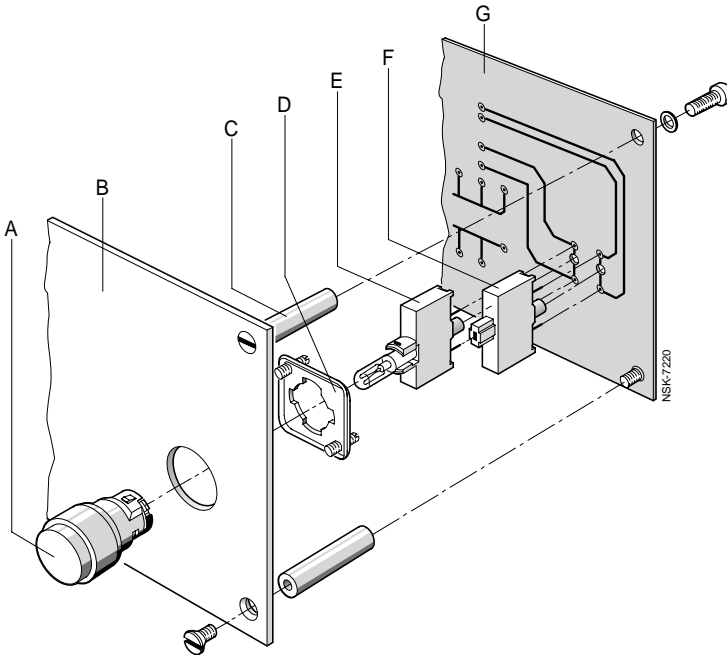
6) Not suitable for 30 mm pushbutton.

7) Not to be used in combination with safety locks, 3 position, momentary contact.

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

For PCB mounting



These 3SB1 contact blocks and lampholders are designed for use with printed circuit boards.

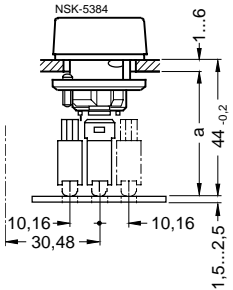
- A Actuator
- B Front plate
- C Spacer
- D Shim
- E Lampholder
- F Contact block
- G PCB

Specifications

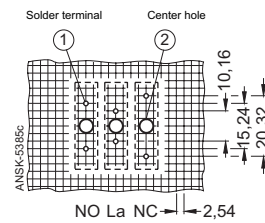
DIN VDE 0660 and IEC 60 947-5-1.

Please see page 9/79 for technical data if not given below.

Pushbutton unit and illuminated pushbutton with contact block and lampholder, with solder pins



Spacing of solder pins



Mounting dimensions

Length a of spacers
 $a = 44^{-0.2}$ minus front plate thickness.

When using backing plates, the length a is reduced by 0.8 mm.

To avoid bending of the PCB when the actuator is operated, sufficient spacers must be provided spaced as shown in the table below:

PCB thickness	Max. spacing between spacers*
1.5 mm	80 mm
2.5 mm	150 mm

When using EMERGENCY STOP actuators generally 50 mm

(These details are based on epoxy resin glass fiber mat.)

3SB1 Pushbutton Units and Indicator Lights

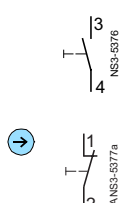
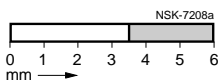
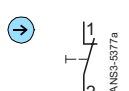
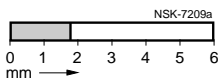
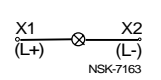
22 mm Mounting Diameter

Technical data

Rated insulation voltage U_i	250 V for contact blocks 1 NO, 1 NC 250 V, max. 2.5 W for BA 9s lampholders					
Pollution degree	Class 3 according to DIN VDE 0110					
Rated thermal current I_{th}, rated operational current I_e, switching capacity (For current carrying capacity of the PCB tracks, see IEC 60 926, Part 3)	40 to 60 Hz AC			DC		
	U_e	$I_e/AC-12$	$I_e/AC-15$	U_e	$I_e/DC-12$	$I_e/DC-13$
	AC V	A	A	DC V	A	A
	220/230	10	4	24 48 110 220	6 4 2 1	6 3 1 0.4
Degree of protection acc. to DIN VDE 0470	IP 20 for lampholder, IP 40 for contact block, IP 65 for actuator					
Connection	Solder pins 0.8 × 0.8 mm					
NC contact	Positive opening					
Maximum equipment per actuator	3 contact blocks or 2 contact blocks + 1 lampholder					
Maximum PCB thickness	2.5 mm					

Contact blocks and lampholders with solder pins

Selection and ordering data

Version	Symbols	Contact travel	Order No.	Price	Weight approx.	Packing
		<div style="display: flex; align-items: center;"> <div style="width: 15px; height: 10px; background-color: gray; margin-right: 5px;"></div> contact closed <div style="width: 15px; height: 10px; border: 1px solid gray; margin-right: 5px; margin-left: 5px;"></div> contact open </div>	▶ Preferred type	1 unit	kg	Unit
3SB14 55-0B	Contact block with one contact 1 NO 1 NC	   	▶ 3SB14 55-0B		0.01	10
3SB14 55-2A	Lampholder BA 9s		▶ 3SB14 55-2A		0.01	10
3SB19 02-2AS	Shim for 30 mm × 30 mm grid	–	▶ 3SB 19 02-2AS		0.02	1

For lamps, see page 9/108.

→ Safety function according to IEC 60 947-5-1-3 and DIN VDE 0660, Part 200.

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Insert labels and insert caps Selection and ordering data

Clear pushbutton units, illuminated pushbutton units and indicator lights can be fitted with insert labels and caps for identification purposes.










These labels and caps are made of clear transparent moulded plastic with black lettering and can be mounted in any 90° position.

Labels without a printed inscription can be marked using a permanent-ink pen.

The inscription (also the special

inscription) has initial capital letters. The symbols, including those not listed in the catalog, are in accordance with DIN report 4.

Inscription	Insert label for flat pushbutton and illuminated pushbutton units		Insert cap for raised push- button and illum- inated pushbutton units		Insert cap for indicator lights		Pack. Unit
	Order No.	Price	Order No.	Price	Order No.	Price	
	▶ Preferred type	1 Unit	▶ Preferred type	1 Unit	▶ Preferred type	1 Unit	
Blank	▶ 3SB19 01-4AS		▶ 3SB19 01-5AA		▶ 3SB19 01-7AA		1
Ein	▶ 3SB19 01-4AB		▶ 3SB19 01-5AB		–		
On	▶ 3SB19 01-4EB		–		–		
Aus	▶ 3SB19 01-4AC		▶ 3SB19 01-5AC		–		
Off	▶ 3SB19 01-4EC		–		–		
Auf	▶ 3SB19 01-4AD		–		–		
Up	▶ 3SB19 01-4ED		–		–		
Ab	▶ 3SB19 01-4AE		–		–		
Down	▶ 3SB19 01-4EE		–		–		
Vor	▶ 3SB19 01-4AF		▶ 3SB19 01-5AF		–		1
Forward	▶ 3SB19 01-4EF		–		–		
Zurück	▶ 3SB19 01-4AG		▶ 3SB19 01-5AG		–		
Reverse	▶ 3SB19 01-4EG		–		–		
Rechts	▶ 3SB19 01-4AH		▶ 3SB19 01-5AH		–		
Right	▶ 3SB19 01-4EH		–		–		
Links	▶ 3SB19 01-4AJ		▶ 3SB19 01-5AJ		–		
Left	▶ 3SB19 01-4EJ		–		–		
Halt	▶ 3SB19 01-4AK		–		–		1
Stop	▶ 3SB19 01-4EL		▶ 3SB19 01-5EL		–		
Auf	▶ 3SB19 01-4AD		▶ 3SB19 01-5AD		–		
Open	▶ 3SB19 01-4EP		–		–		
Zu	▶ 3SB19 01-4AL		–		–		
Close	▶ 3SB19 01-4EQ		–		–		
Schnell	▶ 3SB19 01-4AM		–		–		
Fast	▶ 3SB19 01-4ER		–		–		
Langsam	▶ 3SB19 01-4AN		–		–		
Slow	▶ 3SB19 01-4ES		–		–		
Betrieb	▶ 3SB19 01-4AP		▶ 3SB19 01-5AP		▶ 3SB19 01-7AP		1
Running	▶ 3SB19 01-4EV		▶ 3SB19 01-5EV		–		
Störung	▶ 3SB19 01-4AQ		▶ 3SB19 01-5AQ		▶ 3SB19 01-7AQ		
Fault	▶ 3SB19 01-4EW		▶ 3SB19 01-5EW		–		
Einrichten	▶ 3SB19 01-4AR		–		–		
Reset	▶ 3SB19 01-4EM		▶ 3SB19 01-5EM		–		
Test	▶ 3SB19 01-4EN		–		–		
Start	▶ 3SB19 01-4EK		–		–		

Symbol	Significance	Serial No. acc. to DIN report 4				
Symbol						
	Off	15	▶ 3SB19 01-4MB	▶ 3SB19 01-5MB	–	1
	On	16	▶ 3SB19 01-4MC	▶ 3SB19 01-5MC	–	
		–	▶ 3SB19 01-4MD	–	–	
		–	▶ 3SB19 01-4ME	–	–	
Equipment symbols						
	Electric motor	42	▶ 3SB19 01-4PA	–	▶ 3SB19 01-7PA	1
	Horn	155	▶ 3SB19 01-4PB	▶ 3SB19 01-5PB	▶ 3SB19 01-7PB	
	Water supply	–	▶ 3SB19 01-4PC	–	▶ 3SB19 01-7PC	
	Pump	695	▶ 3SB19 01-4PD	–	▶ 3SB19 01-7PD	
	Coolant pump	713	▶ 3SB19 01-4PE	–	–	

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Insert labels and insert caps Selection and ordering data

Symbol	Significance	Serial No. acc. to DIN report 4	Insert label for flat pushbutton and illuminated pushbutton units		Insert cap for raised push- button and illumina- ted pushbutton units		Insert cap for indicator lights		Pack.
			Order No.	Price	Order No.	Price	Order No.	Price	
			▶ Preferred type	1 Unit ▶	▶ Preferred type	1 Unit ▶	▶ Preferred type	1 Unit	Unit
Motion symbols									
	Motion in direction of arrow	28	▶ 3SB19 01-4NA		3SB19 01-5NA		–		1
	Motion in direction of arrow	28 b	▶ 3SB19 01-4NB		–		–		
	Clockwise rotation	100	▶ 3SB19 01-4NC		3SB19 01-5NC		–		
	Anticlockwise rotation	114	▶ 3SB19 01-4ND		3SB19 01-5ND		–		
	Fast motion	1919	3SB19 01-4NE		–		–		
	Feed	1880	3SB19 01-4NF		–		–		
	Increase, plus	40	▶ 3SB19 01-4NG		3SB19 01-5NG		–		
	Decrease, minus	41	▶ 3SB19 01-4MC		3SB19 01-5MC		–		
Control symbols									
	Clamp	259	▶ 3SB19 01-4QB		3SB19 01-5QB		3SB19 01-7QB		1
	Release	169	▶ 3SB19 01-4QC		3SB19 01-5QC		3SB19 01-7QC		
	Brake on	265	3SB19 01-4QD		–		3SB19 01-7QD		
	Brake off	266	▶ 3SB19 01-4QE		3SB19 01-5QE		3SB19 01-7QE		
	Lock	46	3SB19 01-4QF		–		–		
	Unlock	45	3SB19 01-4QG		–		3SB19 01-7QG		
	Set up	986	3SB19 01-4QH		–		3SB19 01-7QH		
	On/Off, momentary contact	19	▶ 3SB19 01-4QJ		–		–		
	Manual operation	35	3SB19 01-4QK		3SB19 01-5QK		3SB19 01-7QK		
	Automatic sequence	267	3SB19 01-4QL		3SB19 01-5QL		3SB19 01-7QL		
	Intake	264	3SB19 01-4QM		–		–		
	Discharge	263	3SB19 01-4QN		–		3SB19 01-7QN		
	Cooling	491	3SB19 01-4QR		–		3SB19 01-7QR		
Other symbols according to DIN report 4 1) Supplement the Order No. with Order Code "K3Y" and add the Serial.No. according to DIN report 4.			3SB19 01-4AZ K3Y		3SB19 01-5AZ K3Y		3SB19 01-7AZ K3Y		1
Labels and caps with inscriptions and symbols not listed above: There is space for one line with a maximum of 6 letters each 3 mm high.			3SB19 01-4AZ K0Y, K1Y, K2Y or K9Y		3SB19 01-5AZ K0Y, K1Y, K2Y or K9Y		3SB19 01-7AZ K0Y, K1Y, K2Y or K9Y		1
Supplement the Order No. with the following Order Code: – Capital initial letters K0Y – Capital letters K1Y – Small letters K2Y – According to order K9Y			Ordering details: when ordering state the required inscription in plain text in addition to the Order No. In the case of special inscriptions in languages other than German, give the exact spelling and specify the language.						
Non-transparent inscription labels Can only be used with clear pushbuttons. The labels have inscriptions on both sides. Front: red O Rear: green I White letters Black letters			3SB19 01-4MG 3SB19 01-4MF		– –		– –		1

1) Special symbols on request.

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter


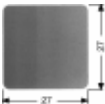


Nameplates Selection and ordering data

Consist of a black moulded plastic holder and the inscription plate (silver with black lettering).

The inscription (or special inscription) has capital initial letters. In the case of special inscriptions in languages other than German, give the exact spelling and specify the language.

Two versions are available:
1. Stick-on nameplate.
Size: 12.5 mm × 27 mm or 27 mm × 27 mm.
The rear of the label has an adhesive coating.

2. Snap-on nameplate.
Size: 17.5 mm × 28 mm (inscription area 17.5 mm × 28 mm).
This label can only be used with 22 mm dia. units.

Inscription	Stick-on nameplate 12.5 × 27 mm		Stick-on nameplate 27 × 27 mm		Snap-on nameplate 17.5 × 28 mm		Pack. Unit
	Order no. Preferred type	Price 1 unit	Order No.	Price 1 unit	Order No.	Price 1 unit	
Inscription plates							
Inscription plate 3SB19 01-2AA without inscription 12.5 mm × 27 mm 	Blank	▶ 3SB19 01-2AA	3SB19 06-2AA		3SB19 04-2AA		1
	Ein	▶ 3SB19 01-2AB	–		3SB19 04-2AB		
	On	▶ 3SB19 01-2EB			3SB19 04-2EB		
	Aus	▶ 3SB19 01-2AC			3SB19 04-2AC		
	Off	▶ 3SB19 01-2EC			3SB19 04-2EC		
	Auf	▶ 3SB19 01-2AD			3SB19 04-2AD		
	Up	▶ 3SB19 01-2ED			–		
Ab	▶ 3SB19 01-2AE			3SB19 04-2AE			
Down	▶ 3SB19 01-2EE			–			
Inscription plate 3SB19 06-2AA without inscription 27 mm × 27 mm 	Vor	▶ 3SB19 01-2AF	–		3SB19 04-2AF		1
	Forward	▶ 3SB19 01-2EF			–		
	Zurück	▶ 3SB19 01-2AG			3SB19 04-2AG		
	Reverse	▶ 3SB19 01-2EG			3SB19 04-2EG		
	Rechts	▶ 3SB19 01-2AH			3SB19 04-2AH		
Right	▶ 3SB19 01-2EH			3SB19 04-2EH			
Links	▶ 3SB19 01-2AJ			3SB19 04-2AJ			
Left	▶ 3SB19 01-2EJ			3SB19 04-2EJ			
Inscription plate 3SB19 01-2BA with inscription 12.5 mm × 27 mm 	Halt	▶ 3SB19 01-2AK	–		3SB19 04-2AK		1
	Stop	▶ 3SB19 01-2EK			3SB19 04-2EK		
	Auf	▶ 3SB19 01-2AD			3SB19 04-2AD		
	Open	▶ 3SB19 01-2EP			–		
	Zu	▶ 3SB19 01-2AL			3SB19 04-2AL		
	Close	▶ 3SB19 01-2EQ			–		
	Schnell	▶ 3SB19 01-2AM			3SB19 04-2AM		
	Fast	▶ 3SB19 01-2ER			–		
Langsam	▶ 3SB19 01-2AN			3SB19 04-2AN			
Slow	▶ 3SB19 01-2ES			–			
Inscription plate 3SB19 04-2AA without inscription 17.5 mm × 28 mm 	Betrieb	▶ 3SB19 01-2AP	–		3SB19 04-2AP		1
	Running	▶ 3SB19 01-2EV			–		
	Störung	▶ 3SB19 01-2AQ			3SB19 04-2AQ		
	Fault	▶ 3SB19 01-2EW			3SB19 04-2EW		
	Einrichten	▶ 3SB19 01-2AR			3SB19 04-2AR		
	Reset	▶ 3SB19 01-2EM			3SB19 04-2EM		
	Hand Auto	▶ 3SB19 01-2BA			3SB19 04-2BA		
	Man Auto	▶ 3SB19 01-2EU			3SB19 04-2EU		
Hand 0 Auto	▶ 3SB19 01-2BE			3SB19 04-2BE			
Man 0 Auto	▶ 3SB19 01-2ET			3SB19 04-2ET			
Stop Start Test Start	▶ 3SB19 01-2BC	–		3SB19 04-2BC		1	
	▶ 3SB19 01-2EN			3SB19 04-2EN			
	▶ 3SB19 01-2EL			3SB19 04-2EL			
Symbols							
O	▶ 3SB19 01-2MB	–		3SB19 04-2MB		1	
I	▶ 3SB19 01-2MC			3SB19 04-2MC			
II	–			3SB19 04-2MD			
III	▶ 3SB19 01-2ME			3SB19 04-2ME			
O-I	▶ 3SB19 01-2MF			3SB19 04-2MF			
I-O-II	▶ 3SB19 01-2MG			3SB19 04-2MG			
1-O-2	–			3SB19 04-2MK			
→	▶ 3SB19 01-2NA			3SB19 04-2NA			
↑	▶ 3SB19 01-2NJ			3SB19 04-2NJ			

3SB1 Pushbutton Units and Indicator Lights

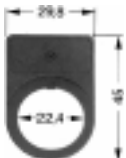

22 mm Mounting Diameter

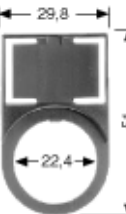
Nameplates Selection and ordering data

Special inscriptions
When ordering, state the desired inscription in plain text in addition to the Order No. and Order Code. In the case of special inscriptions in languages

other than German, give the exact spelling and state the language.
For symbols other than those shown, state also the Serial No. according to DIN report 4.

Supplement the Order No. with the following Order Codes:
 - **K0Y** for initial capital letters
 - **K1Y** for capital letters
 - **K2Y** for small letters
 - **K3Y** for symbols
 - **K9Y** for inscription in accordance with order

Version/inscription	Stick-on nameplate 12.5 × 27 mm Order No. Preferred type Price 1 unit	Stick-on nameplate 27 × 27 mm Order No. Preferred type Price 1 unit	Pack. Unit
<p>Inscription plates with inscriptions and symbols other than those shown</p> <p>Inscription plate 12.5 mm × 27 mm 2 lines with 11 letters each are possible, engraved lettering.</p> <p>Inscription plate 27 mm × 27 mm 5 lines with 11 letters each are possible, engraved lettering.</p>	<p>▶ 3SB19 01-2XZ K0Y, K1Y, K2Y, K3Y or K9Y</p>	<p>–</p>	
<p>Label holder 3SB19 01-0AX for inscription plate 12.5 mm × 27 mm</p> 		<p>▶ 3SB19 06-2XZ K0Y, K1Y, K2Y, K3Y oder K9Y</p>	
<p>Label holder 3SB19 06-0AX for inscription plate 27 mm × 27 mm</p> 			
<p>Label holder for inscription plate 22 mm mounting diameter</p>	<p>▶ 3SB19 01-0AX</p>	<p>▶ 3SB19 06-0AX</p>	
<p>Inscription plates for plotting and adhesive fixing</p>	<p>see page 9/50</p>		

Version/inscription	Snap-on nameplates 17.5 × 28 mm Order No. Preferred type Price 1 unit	Pack. Unit
<p>Inscription plates with inscriptions and symbols other than those shown</p> <p>Inscription plate 17.5 mm × 28 mm 3 lines with 11 letters each are possible, engraved lettering.</p> <p>Label holder for inscription plate 22 mm mounting diameter</p>	<p>▶ 3SB19 04-2XZ K0Y, K1Y, K2Y, K3Y or K9Y</p> <p>▶ 3SB19 04-0AX</p>	
<p>Label holder 3SB19 04-0AX for inscription plate 17.5 mm × 28 mm</p> 		

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Primary nameplates Selection and ordering data

Consist of a black moulded plastic holder and an inscription plate.

The holders can be stuck and/or screwed in position. The inscription plate has an adhesive layer on the rear.

Nameplates with special inscriptions must be ordered as described on page 9/104.

Fig. No.	Version	Order No.	Price 1 unit	Pack. Unit
1	similar to 1	Holder , 64 mm long		1
	similar to 2	Inscription plate for 64 mm long holder without inscription with special inscription, state desired lettering in plain text. Possible arrangements: 1 line with 24 letters, each letter 4 mm high; 2 lines each with 27 letters each letter 3 mm high	3SB19 06-5AX 3SB19 06-5AA 3SB19 06-5XZ K0Y, K1Y, K2Y, K3Y or K9Y	
2	1	Holder , 94 mm long		1
	2	Inscription plate for 94 mm long holder without inscription aluminized red with special inscription, state desired lettering in plain text. Possible arrangements: 1 line with 37 letters, each letter 4 mm high; 2 lines each with 42 letters, each letter 3 mm high	3SB19 06-6AX 3SB19 06-6AA 3SB19 06-7AA 3SB19 06-6XZ K0Y, K1Y, K2Y, K3Y or K9Y	

* Values in brackets apply to 3SB19 06-6 . .

Rectangular frames Selection and ordering data

Made from black moulded plastic, these give the 3SB1 program (22 mm) a rectangular appearance.

Already installed actuators can be changed subsequently to the rectangular design if they are installed in a matching grid layout.

Protective caps cannot be used with rectangular frames.

For the inscription, 3SB19 01 inscription plates should be ordered as shown on pages 9/103 and 9/104.

Fig. No.	Version	Order No.	Price 1 unit	Pack. Unit
Without inscription plate				
1	Single frame	3SB19 03-0AA		10
5	Double frame	3SB19 03-0AG		10
4	Triple frame	3SB19 03-0AM		5
8	Side part for double and triple frames	3SB19 03-0AS		50
For inscription plate, 12.5 mm x 27 mm				
2	Single frame	3SB19 03-0AB		10
6	Double frame	3SB19 03-0AH		10
4	Triple frame	3SB19 03-0AN		5
9	Side part for double and triple frames	3SB19 03-0AT		50
For inscription plate, 27 mm x 27 mm				
3	Single frame	3SB19 03-0AC		10
7	Double frame	3SB19 03-0AJ		10
4	Triple frame	3SB19 03-0AP		5
10	Side part for double and triple frames	3SB19 03-0AW		50
-	Clip for connecting double and triple frames 2 units per connecting point for version without inscription plate 3 units per connecting point for version with inscription plate	3SB19 03-0AV		50

* 46 mm for triple frames for inscription plate 12.5 mm x 27 mm, 60 mm for triple frames for inscription plate 27 mm x 27 mm.

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Accessories and spare parts

Fig. No.	Version	Colour	Order No.	Price	Weight approx.	Pack.
			Preferred type	1 unit	kg	Unit
1	Front ring Moulded plastic, h = 12 mm sim. 1 for actuator	black aluminized bright chromed	▶ 3SB19 11-0BA ▶ 3SB19 11-0EA ▶ 3SB19 11-0DA			1
2	Metal, h = 12 mm sim. 1 h = 18.5 mm sim. 1 h = 23.5 mm for actuator	aluminized	▶ 3SB19 11-0AA ▶ 3SB19 11-0AD ▶ 3SB19 11-0AH			
3	Metal, with side cutouts, h = 18.5 mm	aluminized	▶ 3SB19 11-0AE			
4	Metal, with castellations, h = 18.5 mm h = 23.5 mm	aluminized	▶ 3SB19 11-0AF ▶ 3SB19 11-0AJ			
5	Screw lens raised version	red green yellow clear	▶ 3SB19 10-1HC ▶ 3SB19 10-1HE ▶ 3SB19 10-1HD ▶ 3SB19 10-1HH			1
6	Adapter ¹⁾ for fitting an actuator of 22 mm design in a 30.5 mm mounting hole		▶ 3SB19 02-0AV			1
7	Adapter with reflector for use in indicator lights, raised version		▶ 3SB19 02-1AT			1
8	Sealable cap ²⁾ for pushbutton units with flat pushbutton	black transparent	▶ 3SB19 02-0AL ▶ 3SB19 02-2AR			1
9	Blank plug (degree of protection IP 65) moulded plastic, for 22.5 mm	black aluminized	▶ 3SB19 02-0AR ▶ 3SB19 02-0AQ			10
Fig. No.	Suitable for	Version	Order No.	Price	Weight approx.	Pack.
			Preferred type	1 unit	kg	Unit
8	Extension plunger for bridging the gap between a pushbutton and the reset button of a thermal overload relay.	On, off and reset pushbuttons 3SA8 9 . . 3SA8 840 pushbutton units with flat button, also with 12 mm stroke (3SB10 00-0E.02)	▶ 3SX1 335		0.005	1
9	Sleeve for pushbutton units for inserting the 3SX1 335 extension plunger (unscrew front ring and pushbutton, then fit sleeve)	Pushbutton units with flat button	▶ 3SB19 02-1AL		0.002	1
9	Yellow backing plate self-adhesive, external diameter 80 mm 28 mm hole	as contrasting surface for EMERGENCY STOP actuators 3SB1	▶ 3SX1 720 ▶ 3SX1 721		0.005	1
10	Yellow backing plate 1 mm thick external diameter 75 mm 22.5 mm hole	as contrasting surface for EMERGENCY STOP actuators 3SB1	▶ 3SB19 02-2BA ▶ 3SB19 02-2BB		0.006	1
11	Sound transducer for audible signal device BA 9s base; 0.6 W	audible signal device 3SB1	▶ 3SB19 02-2BN		0.003	1
12	Protective collar for front plate mounting	EMERGENCY STOP without positive latch- ing EMERGENCY STOP with pos- itive latching	▶ 3SB19 02-2BM ▶ 3SB39 21-0AX		0.025	1
-	Drilling template for 30 mm horizontal grid	3SB1 pushbutton units and indicator lights 22 mm mounting diameter round and square versions	▶ 3SB19 02-2BG		0.01	1

1) Consists of two metal washers with adhesive on one side. Can also be used as thrust collars for front plates of thin insulating material.

2) Not suitable for use with label holders; can be used with SIGNAL 3SB3.

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Accessories and spare parts

Fig. No.	Version	Colour	Lock No.	Order No.	Price	Pack.
				Preferred type	1 unit	Unit
1	1	Button, flat for pushbutton units	black red yellow green blue white clear	▶ 3SB19 10-0AB		
				▶ 3SB19 10-0AC		
				▶ 3SB19 10-0AD		
				▶ 3SB19 10-0AE		
				▶ 3SB19 10-0AF		
				▶ 3SB19 10-0AG		
				▶ 3SB19 10-0AH		
2		for illuminated pushbutton units	red yellow green blue white clear	▶ 3SB19 10-0CC		
				▶ 3SB19 10-0CD		
				▶ 3SB19 10-0CE		
				▶ 3SB19 10-0CF		
				▶ 3SB19 10-0AG		
				▶ 3SB19 10-0AH		
3	2	Button, raised for pushbutton units	black red yellow blue clear	▶ 3SB19 10-0BB		
				▶ 3SB19 10-0BC		
				▶ 3SB19 10-0BD		
				▶ 3SB19 10-0BF		
				▶ 3SB19 10-0BH		
4		for illuminated pushbutton units	red yellow blue clear	▶ 3SB19 10-0DC		
				▶ 3SB19 10-0DD		
				▶ 3SB19 10-0DF		
				▶ 3SB19 10-0BH		
3		Mushroom-shaped button, Ø 30 mm	black yellow green	▶ 3SB19 10-0FB		
				▶ 3SB19 10-0FD		
				▶ 3SB19 10-0FE		
-	-	Illuminated mushroom-shaped button, Ø 30 mm	yellow green white	▶ 3SB19 10-0KD		
				▶ 3SB19 10-0KE		
				▶ 3SB19 10-0KG		
5	4	Screw lens with lamp test (push to test)	red yellow green blue white clear	▶ 3SB19 10-0EC		
				▶ 3SB19 10-0ED		
				▶ 3SB19 10-0EE		
				▶ 3SB19 10-0EF		
				▶ 3SB19 10-0EG		
				▶ 3SB19 10-0EH		
6	5	with concentric rings	red yellow green blue white clear	▶ 3SB19 10-1GC		
				▶ 3SB19 10-1GD		
				▶ 3SB19 10-1GE		
				▶ 3SB19 10-1GF		
				▶ 3SB19 10-1GG		
				▶ 3SB19 10-1GH		
6	6	for labelling using insert cap	yellow clear	▶ 3SB19 10-1LD		
				▶ 3SB19 10-1LH		
7		for use with glow lamps and LED lamps	red yellow green blue	▶ 3SB19 10-1PC		
				▶ 3SB19 10-1LD		
				▶ 3SB19 10-1PE		
				▶ 3SB19 10-1PF		
7		Key for safety locks	CES lock	LSG 1		
				SSG 10		
				SSP 9		
			IKON lock	360012 K1		
				BKS lock	S1	
			O.M.R lock	light blue		
				red		
				black		
				yellow		
8	8	Clear protective cap, material silicone, 22 mm for pushbutton unit	for flat button for raised button	▶ 3SB19 02-0AK		
				▶ 3SB19 02-0AN		
				▶ 3SB39 21-0BA		
				▶ 3SB19 02-1AW		
9	8	Clear protective cap, 22 mm¹⁾ Material Elastolan Material PVC	for flat button for raised button	▶ 3SB39 21-0AM		
				▶ 3SB19 02-2AN		
9	9	Clear protective cap, material silicone, 22 mm for mushroom push-pull buttons and pushbuttons ²⁾ , Ø 40 mm		▶ 3SB19 02-2BH		

1) Can be used at ambient temperatures of 5 °C upwards.

2) With turn-to-release mushroom-shaped pushbuttons, the endurance life of the protective cap is 100 000 operations.

3SB1 Pushbutton Units and Indicator Lights

22 mm Mounting Diameter

Accessories and spare parts

Fig. No.	Version	Order No.	Price	Pack.				
		Preferred type	1 unit	Unit				
1	1	Thrust cap for pushbutton unit, for operating the centre contact block	▶ 3SB19 02-0AA	1				
	2	Thrust pad for rotary drive, for operating the centre contact block	▶ 3SB19 12-0AN	1				
	3	Mounting tool for buttons with 22 mm front ring	▶ 3SB19 02-2BR	1				
		for 22 and 30 mm buttons and screw lenses	▶ 3SB19 02-2BS					
2		for potentiometer drive and pushbutton with 12 mm stroke	3SX1 707					
	-	Flat plug connection for plug receptacles according to DIN 46 245 and DIN 46 247 2 x 6.3-2.5 or 4 x B 2.8-1	▶ 3SB19 02-0AW	1				
4		Identification plate	3TX4 210-0H	100				
	-	8WA8 label strip	see Part 16					
Fig. No.	Version	For use with	Lamp voltage	Color	Order No.	Price	Weight approx.	Pack.
					Preferred type	1 unit	kg	Unit
3	5	Incandescent lamps, BA 9s base						
		1.2 W		24 V		▶ 3SB19 02-0AY	0.005	10
		approx. 2 W max length 28 mm bulb diameter 9 mm	3SB1 indicator lights and illuminated pushbutton units, 3SB1 illuminated knobs	6 V 12 V 24 V 30 V 48 V 60 V		▶ 3SX1 342 ▶ 3SX1 343 ▶ 3SX1 344 ▶ 3SB19 02-2AF ▶ 3SB19 02-1AP ▶ 3SR94 24	0.005	
	approx. 2.6 W length 28 mm bulb diameter 10 mm	3SB1 indicator lights and illuminated pushbutton units, 3SB1 illuminated knobs	110 ... 130 V ¹⁾		▶ 3SX1 731	0.005		
-	Multi-incandescent lamp BA 9s base 25 000 h lamp life high resistance to vibration	3SB1 indicator lights and illuminated pushbutton units, 3SB1 illuminated knobs	24 V		▶ 3SB19 02-2BU	0.005	10	
sim. 5	LED lamps, super bright BA 9s base, max. length 28 mm							
		Operational current approx. 20 mA	3SB1 indicator lights and illuminated pushbutton units, 3SB1 illuminated knobs	UC 24 V	red yellow green blue white	▶ 3SB39 01-1CA ▶ 3SB39 01-1BA ▶ 3SB39 01-1DA ▶ 3SB39 01-1PA ▶ 3SB39 01-1QA	0.005	10
	LED lamps, standard bright	15 mA		DC 22 to 32 V	red yellow green	▶ 3SB19 02-4AJ ▶ 3SB19 02-4BJ ▶ 3SB19 02-4CJ	0.005	10
	flashing (1.4 Hz)	29 mA 27 mA 24 mA	3SB1 indicator lights and illuminated pushbutton units,	DC 24 V	red ²⁾ yell. ²⁾ grn. ²⁾	▶ 3SB19 02-4LC ▶ 3SB19 02-4MC ▶ 3SB19 02-4NC	0.005	
sim. 5	Glow lamps²⁾ BA 9s base length 28 mm bulb diameter 10 mm oper. current approx. 1.8 mA		3SB1 indicator lights and illuminated pushbutton units, 3SB1 illuminated knobs	AC 110 V	clear	▶ 3SX1 703	0.005	10
				AC 220 V	clear green	▶ 3SX1 701 ▶ 3SX1 702	0.005	
6	Lamp grip	Lamps with BA 9s base glow lamps with BI-PIN plug connector			▶ 3SB19 02-2AD ▶ 3SB19 02-2AC	0.002	1	
-	Lamp adapter for fitting a Wedge-Base-Socket into a BA 9s lampholder				▶ 3SB19 02-1AU	0.005	1	

1) Also for 230 V when voltage reducers are used.

2) Wrong polarity of the operational voltage (I+/L-) will destroy the lamp.
Not suitable for operation on unsmoothed DC.

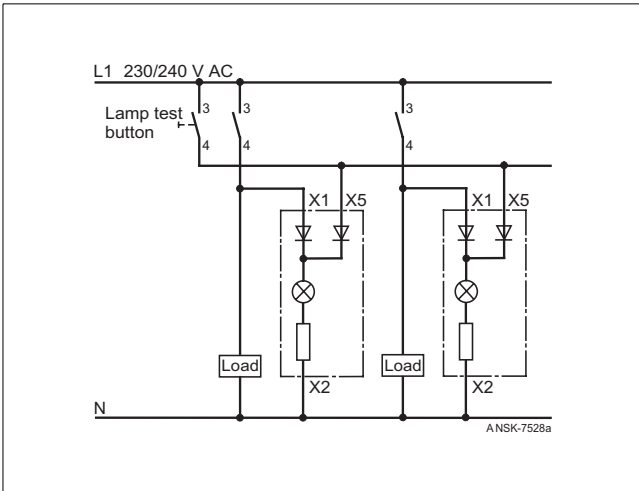
3) Due to the inherent orange colour of glow lamps and their lower luminance level compared to incandescent lamps, it is recommended that they should only be used with clear or red screw lenses and in areas where ambient light levels are not very high.

3SB1 Pushbutton Units and Indicator Lights

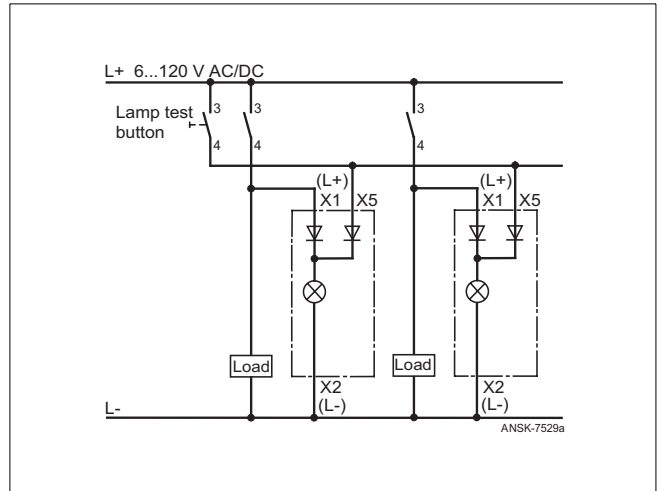
22 mm Mounting Diameter

Typical circuits

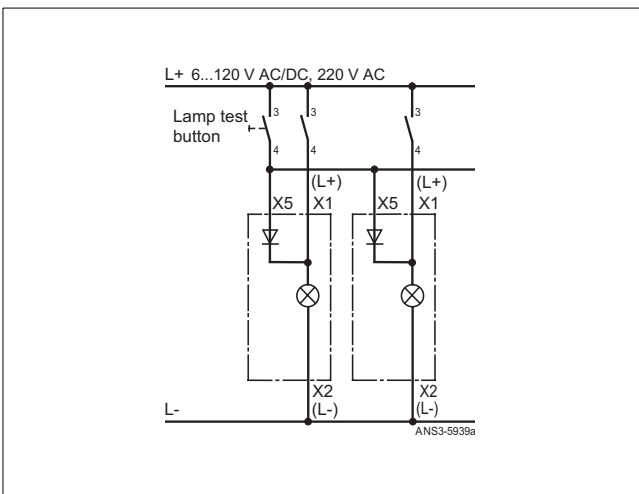
Lampholders with integral diode for decoupled lamp test function



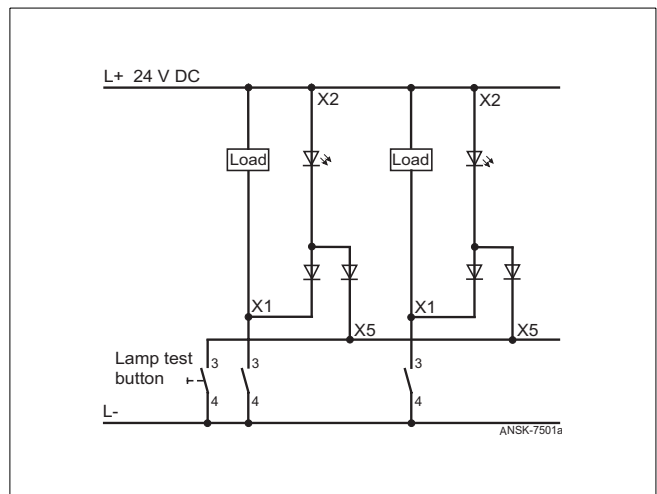
3SB14 00-2N or 3SB34 00-1F lampholders
for 130 V incandescent lamps, maximum 2.6 W



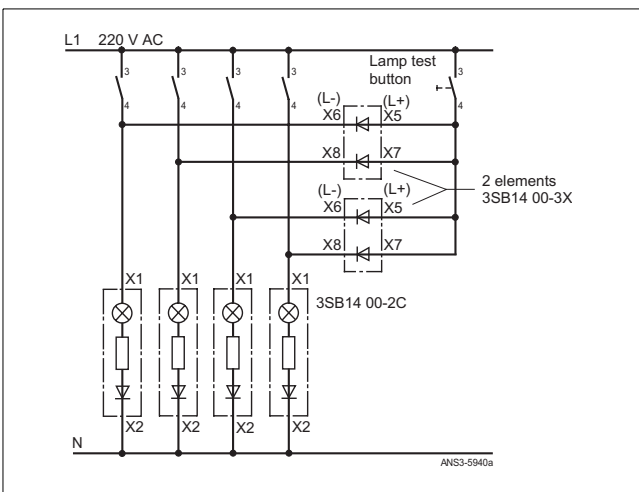
3SB14 00-2P or 3SB34 00-1G lampholders
for 6V to 120 V incandescent lamps, maximum 2.6 W
or 24 V AC/DC LED lamps



3SB14 00-2Q or 3SB34 00-1H lampholders
for 6V to 120 V incandescent lamps, maximum 2.6 W
or 110/220 V AC glow lamps or 24V AC/DC LED lamps



3SB34 00-1L lampholders
for 6V to 120 V incandescent lamps, maximum 2.6 W
or 24 V DC LED lamps



Typical lamp test circuit with 3SB14 00-3X blocks

Lampholders

3SB14 00-2M,
3SB14 00-2N,
3SB14 00-2P,
3SB34 00-1F,
3SB34 00-1G,
3SB34 00-1L:

- Surge suppression required when connected in parallel with inductive loads (e.g. contactors)

Lampholders
3SB14 00-2Q,
3SB34 00-1H:

- When tested with AC voltage, lamps light at half power

- Does not function when using voltage reducers with capacitor or resistance or with lamp transformer.

- Does not function when a lamp is connected in parallel to a load.

Application examples: lamp test circuit, interference suppression, voltage peak suppression, surge suppression of DC coils, diode gates, rectifier circuits.

The diode element contains two 1N 4007 diodes. The element can be snapped onto the holder in any position.